

CENTRAL INTELLIGENCE AGENCY

COUNTRY USSR

DATE DISTR. 9 JUN 1953

SUBJECT Hygiene and Safety Measures/Kharkov Tractor Plant/
Bolshevik Machine Plant

NO. OF PAGES 3

PLACE
ACQUIREDNO. OF ENCLS.
(LISTED BELOW)

DATE
ACQUIRED

SUPPLEMENT TO
REPORT NO.

DATE OF INFORMATION

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1. Industrial hygiene and safety measures at the Krasny Excavator Plant in Kiev, the Bolshevik Machine Plant in Kiev, and the Kharkov Tractor Plant were excellent. Safety and sanitary conditions of personnel were the responsibility of the Special Division, Industrial Hygiene Department, Ministry of Industry. Workers in the welding department and the hot metals department, lead workers, and blacksmiths were issued the following equipment upon entering on duty: asbestos shoes, asbestos gloves, leather aprons, sleeve protectors, and safety goggles. This equipment had to be worn at all times and was deposited in the workers' lockers at the end of their shifts. Workers in this category also had seltzer water or fresh milk (one liter per person per day). Their work shifts were six hours as compared to eight and nine hours for other workers in the plants.
2. Sanitary conditions were the responsibility of a Sanitation Division doctor. We had wash basins with hot water at all times and both liquid and grit-type soap. Sawdust was sometimes available to mix with soap when hands were extra dirty. There were roll towel racks and hot air for drying one's hands. Braking water was heavily chlorinated during the summers. Shower rooms, first-aid stations, and clinics were available.
3. The Engineer of Technical Safety was responsible for safeguarding machinery and equipment. He, and several assistants, made sure that each bolt and gear box was shielded, that all grinding wheels had safety shields, and that acid and dust areas had adequate air-removal facilities and the air changed frequently. This was a tremendous responsibility. The engineer in charge suffered serious consequences when a worker was injured because of lack of safety guards.

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4. Sanitary conditions in Kiev were excellent in certain parts, not so good in others. Kiev was a clean city, however, compared to Kharkov. Each yard had a concrete enclosed cistern for garbage. A Department of Sanitation employee, called "dvirnik" (yard man), went through the yards every day and covered the garbage with a mixture of lime and chlorine. There were garbage pickups once each week unless an unusually heavy load occurred and the yard man called for extra pickups. Collections were by closed trucks loaded by hand shovels. The big factories had large covered cesspools. All industrial sewage and waste was deposited in sedimentation pools in a large field about 12 kilometers east of the Dnestr River. All of this waste was screened and filtrated; the water was pumped out of these pools into irrigation ditches, and the sediment was removed and used for road building and, in some instances, for fertilizer. All public squares, parks, and other memorial places in Kiev disposed of waste and sewage in this large field also. There were plenty of public rest rooms, with special structures for men only.
5. Approximately 90 per cent of the houses in Kiev were included in the network of the sewage system. Kiev had an ordinance which prohibited new domestic construction in an area where sewers were not already installed. The roads in areas approved for new domestic construction had to be paved or covered with cobblestone.
6. Kharkov, being more industrial than Kiev, was much dirtier, as was Baku. Keeping Kharkov clean was difficult because of coal dust. Baku, on the other hand, was dirtied constantly by oily substances.
7. There were no predominant diseases in the above cities except gripe which appeared more in Kiev than in Kharkov and Baku. Baku had an outbreak of malaria in 1925 which almost reached epidemic proportions. In Kharkov, tuberculosis and bronchial illnesses were more predominant than elsewhere. [REDACTED] outbreak of tuberculosis on the Iranian border in 1924 - 1925 but have heard of none since. After the 1931 - 1934 famine, deficiency of certain organisms caused some people (many children) to die [REDACTED]
8. [REDACTED]
9. The Division of Expediting under OTK (Division of Technical Controls) was instrumental in moving the tractor producing facilities to Chelvabinsk. [REDACTED]
10. Machinery which was moved from the Tractor Plant consisted of lathes, mills, shapers, some of the welding equipment, and all other automatic machines. Equipment which was not removed (cranes, turbines, and railroad-loading equipment) was blown up or damaged by sledge hammers. Much of the machinery was destroyed by aerial bombardment while still on flat cars on the Tractor Plant railroad siding.
11. The Kharkov Tractor Plant (and probably many other plants throughout the USSR) was so built that it could be converted to war production within about 24 hours. There were many special lathes capable of boring cannon barrels; and a large number of machines were held ready in reserve. Quite a few of these machines served a dual purpose. [REDACTED] the conversion potential of the Kharkov Tractor Plant would be approximately 10 tanks per day. SP Gun and other AFV production potential would have been about the same as that of tanks.
12. Items which were utilized in a military vehicle and produced in a tank plant were control differentials and tracks and rollers for certain types of tractors such as the Caterpillar tractor.

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13. Some of the tank engines which were very powerful could be used also on a hitch-tractor or carryall. As for items utilized in a military weapon, nothing except the metal which could be scrapped was usable. The rolling mills which were used to produce military equipment could be used with slight adjustment for producing tractor parts.
14. [REDACTED] reconstruction of the tractor works could be accomplished in a minimum amount of time. Without a doubt that has been done.
15. The Kharkov Tractor Plant did not produce components for tanks which were produced by Plant 183.
16. Concerning heat-treating equipment at the Kharkov Tractor Plant, there were fifty Siemens-Schukert furnaces, gas-fired, 4-atmosphere type. Quality control equipment consisted of electric pyrometers and Zeiss calorimeters. The furnaces were capable of hardening up to 9° hardness, using the Brinell gradients system. There was also the brine, oil, and air-hardening equipment available.
17. The Bolshevik Plant produced no marine steam engines; it produced only stationary steam engines. [REDACTED] a naval shipbuilding plant in the Kiev area, built in 1936, which, after four or five months, began producing 600 steam engines a year. These were of 1200 hp capacity. Leninska Kuznya, located near Kiev #1 railroad station, was another plant in the Kiev area which produced marine steam engines. This plant had about four thousand employees and was producing four to five steam engines a month in 1937. [REDACTED]
18. These engines were used exclusively for vessels which were built in Kiev and which were used for river traffic. Some of the vessels were 150 meters long.
19. [REDACTED] components or machinery for merchant or naval shipbuilding. The only plant doing such work was located at Nikolayev. This plant employed about 60 thousand persons and had a reputation for manufacturing excellent naval equipment.

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